

CLAIMS

1. Device (8) for protecting objects (7) placed inside the rear boot (2) of a motor vehicle bearing a foldaway roof (1) movable between a deployed position in which it covers the passenger compartment of the vehicle, and a folded, stored position in which it is stored and retracted in the boot (2) closed with a hood (5), the device (8) comprising a panel (9) forming the vertical limit between a protected zone (10) of the boot (2) used to receive the objects (7) and accessible when the boot (2) is open from the rear forward, and a second zone (11) of the boot (2) used to receive the roof (1) in the folded, stored position and located above the protected zone (10), the panel (9) being moveable between at least a low protecting position in which the protected zone (10) fills a first volume which is free when the boot (2) is closed and the roof (1) is in its folded, stored position, and a high protecting position in which the protected zone (10) fills a second volume which is free when the boot (2) is closed and the roof (1) is in its deployed position, first (12) and second (13) securing means being used to respectively lock the panel (9) in its low protecting position and in its high protecting position, the panel (9) in the low protecting position being used to co-operate with a first sensor (14) so as to authorise the folding of the roof (1), wherein the co-operation of the panel (9) with the first sensor (14) is such that, when the panel (9) is higher than the low protecting position, the roof (1) can not be folded, and in that the co-operation of the panel (9) with a second sensor (15) is such that, when the panel (9) is higher than the high protecting position, the boot (2) can not be closed.

2. Device (8) set forth in claim 1, wherein an arm (16) is attached to each lateral side of the panel (9) in a movable manner in the transversal direction to the vehicle, each arm (16) comprising a stub (17) projecting transversally towards the outside of the protected zone (10), an anchorage element (19) integral with the body (6) comprises a first opening (18) in which the first sensor (14) is housed, the stub (17) being used to penetrate into the first opening (18) in order to lock the panel (9) in its low protecting position and to actuate the first sensor (14).

3. Device set forth in claim 2, wherein each stub (17) at the lower end of the corresponding arm (16), which extends towards the bottom of the boot (2) and which is attached in a flexible manner to the panel (9), is constantly solicited in the direction of the corresponding anchorage element (19).

4. Device set forth in claim 2 or 3, wherein each anchorage element (19) comprises a second opening (20) in which the second sensor (15) is housed, the stub (17) being used to penetrate into the second opening (20) in order to lock the panel (9) in its high protecting position and to actuate the second sensor (15).

25 5. Protective device set forth in one of claims 1 to 4, wherein, when the roof (1) is in its deployed position and the boot (2) is open from the rear forward, the panel (9) can be placed in a high introductory position above the high protecting position so as to facilitate the placing of luggage  
30 (7) in the protected zone (10).

6. Protective device set forth in claim 5, wherein third securing means (21) are used to lock the panel (9) in its high introductory position.

5       7. Device set forth in claim 6 dependent on claim 2, wherein the anchorage element (19) comprises a third opening (22) in which the stub (17) is used to penetrate in order to lock the panel (9) in its high introductory position.

10       8. Protective device set forth in one of claims 1 to 7, the vehicle being fitted with a device used to facilitate the placing of objects (7) under the roof (1) by guiding it from its folded, stored position to a folded, raised position in which the boot (2) is open from the rear forward and the roof  
15       (1) at least partially projecting out of the boot (2), wherein, when the roof (1) is in its folded, raised position and the boot (2) is open from the rear forward, the panel (9) can be moved into a low introductory position beyond the low protecting position so as to facilitate the placing of luggage  
20       (7) in the protected zone (10), the co-operation of the panel (9) with the first sensor (14) being such that, when the panel (9) is higher than the low protecting position, the roof (1) can not be lowered and the boot (2) can not be closed.

25       9. Device set forth in claim 8, wherein fourth securing means (23) are used to lock the panel (9) in its low introductory position.

10. Device set forth in claim 9 dependent on claim 2,  
30       wherein the anchorage element (19) comprises a fourth opening (24) in which the stub (17) is used to penetrate in order to lock the panel (9) in its low introductory position.